Departmental Standard Operating Procedure (SOP)

Title: Nozzle selection/change Version #: 2.0

Department: Flow Cytometry Core Facility Version Date: 01/31/19

1. Purpose:

To change the configuration on the BD FACSAria in order select the appropriate nozzle size.

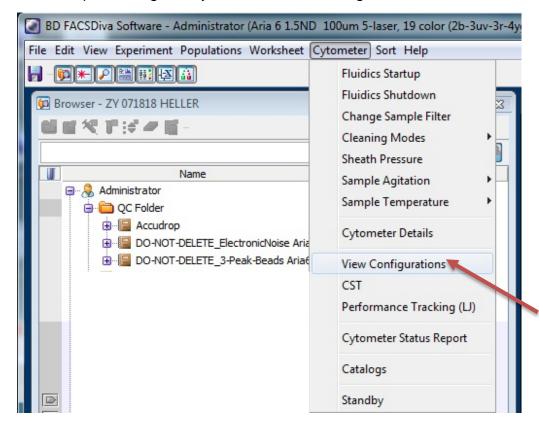
2. Scope:

This method applies to all staff and users of the Flow Cytometry Core Facility

- 3. Policy:
- 4. Supplies Needed:
 - a. BD FACSAria
 - b. 70um, 100um, or 130um nozzle.

Changing the configuration:

- 1. Ensure that the stream is off.
- 2. On the top toolbar go to Cytometer→View Configurations



Cytometer Configuration Cytometer: BD FACSAri Cytometer Name: FACSAriallu BD FACSAria II Aria 6 1.5ND 100um 5-laser, 19 color (2b-3uv-3r-4yg-6v) Serial Number: P46900038 Configurations Parameters Filters and Mirrors Aria 6 1.5ND 100um 5-laser, 19 color (2b-3uv-3r-4yg-6v) Base Configurations Red Laser 561 Yellow-Green Laser Blue Laser Violet Laser ■ NEW - 5-laser, 19 color (2b-3uv-3r-4yg-6v) (405nm) (633nm) (561nm) (488nm) Service Only Service - 5-laser, 19 color (2b-3uv-3r-4yg-6v) Current Config Aria6 70um 5-laser, 19 color (2b-3uv-3r-4yg-6v) 02/06/17... Aria6 100um 5-laser, 19 color (2b-3uv-3r-4yg-... 02/14/17 ... Flowcell square cuvette upgrade Aria 6 1.5 ND 70um 5-laser, 19 color (2b-3uv-... 08/10/17. Aria 6 1.5ND 100um 5-laser, 19 color (2b-3uv. aria 6 1.5ND 130um 5-laser, 19 color (2b-3uv... 02/26/18 ... 355 UV Laser (355nm) All Red 355 UV 561 Yellow-Green Blue Violet Sheath Pressure (psi): 20.00 Window Extension (µs): 2.00 Nozzle Size (u):

3. Select the correct configuration for the nozzle size being used.

- After selecting the correct nozzle size →click "Set Configuration"
- 5. Click ok to confirm and exit the CS&T program.
- 6. Once back in the DIVA software, select "use CS&T Settings" when prompted.



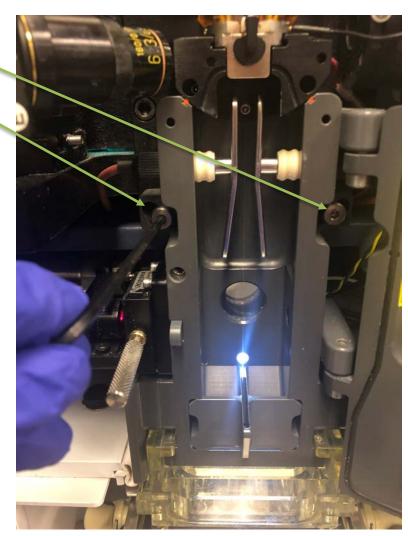
Changing the nozzle:

1. Check to make sure that the stream is off.

Cancel

- 2. Remove the nozzle you wish to change out from the flow cell and place it in the appropriate receptacle (i.e.15 mL conical tube with H2O).
- 3. Sonicate the correct nozzle in a 15mL conical tube with H2O for 1 minute.
- 4. Decant the water, gently dry the nozzle with a Kim Wipe, and place the nozzle in the flow cell.
- 5. Start the stream.
- 6. Using a hex key, loosen the two adjustment screws and slightly move the sort block so that the stream is centered in the middle of the waste catcher. Once adjusted, hand tighten (being careful not to over tighten) the screws.

Adjustment screws are located on either side of the sort block.



Adjust the sort block so that the stream is centered.

*Stream shown in picture is slightly to the left and block needs to be adjusted.

7. Proceed with QC and sort as per the FACSAria™ Startup & QC Procedure.